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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/170,221	10/13/1998	WILLIAM LO	50100-463	6559

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600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER

BURD, KEVIN MICHAEL

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 06/09/2004

24

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/170,221

Applicant(s)

LO, WILLIAM

Examiner

Kevin M Burd

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7,9-11,16,18,19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7,9-11,16,18,19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This office action, in response to amendment filed 3/30/2004, is a final office action.

### ***Response to Arguments***

2. Applicant's arguments filed 3/30/2004 have been fully considered but they are not persuasive. Applicant refers to independent claims 1 and 16 in the response. It is believed Applicant meant to address independent claims 7 and 16. Applicant says it is not apparent and the examiner has not identified wherein the applied prior art discloses or suggests the emphasized portions of claims 7 and 16 found on pages 6-7 of the response. The examiner will attempt to provide clarification to Applicant.

Applicant states the limitation of "by concurrently asserting a transmit enable signal on a corresponding media independent interface" as stated in claim 7 is not disclosed. The examiner disagrees. As stated in the previous office action, "A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to

the proper destination.” This explanation addresses the limitation. The disrupt enable signal is the “transmit error signal” and the inverse of the “transmit enable signal”.

Applicant states the limitation of “by concurrently asserting a transmit error signal and deasserting the transmit enable signal on the media independent interfaces corresponding to other repeater ports” as stated in claim 7 is not addressed. The examiner disagrees. As stated in the prior office action, “A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to the proper destination.” This explanation addresses the limitation. The disrupt enable signal is the “transmit error signal” and the inverse of the “transmit enable signal”.

Applicant states the limitation of “receiving the transmit data, the deasserted transmit enable signal and the asserted transmit error signal from at least one of the media independent interfaces corresponding to at least one of the other repeater ports” as stated in claim 7 is not addressed. As stated in the previous office action, “A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the

repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to the proper destination." This explanation addresses the limitation. The disrupt enable signal is the "transmit error signal" and the inverse of the "transmit enable signal".

As stated in the previous office action, Vijeh does not disclose a physical layer transmitter transmits the data. However Chou (US 5,850,526) states a LAN station has a physical layer making a physical connection to a medium connected to other LAN stations. The physical layer drives the compressed data packet from the LAN station onto the medium in a serial fashion (column 3, lines 57-63 and figure 2). Vijeh discloses the repeater communication takes place in a LAN transmitting packet data (column 1, lines 5-8). It would have been obvious for one of ordinary skill in the art at the time of the invention that Vijeh transmits data through a physical layer since the physical layer connects the LAN components to the transmission medium as described by Chou.

Therefore, all the limitations of claim 7 are disclosed in the previous rejections and the rejection of claim 7 is maintained.

Applicant states the limitation of "by concurrently asserting a transmit error signal and deasserting a transmit enable signal on the respective media independent interfaces" as stated in claim 16 is not addressed. The examiner disagrees. As stated in the prior office action, "A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made

independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to the proper destination." This explanation addresses the limitation. The disrupt enable signal is the "transmit error signal" and the inverse of the "transmit enable signal".

Applicant states the limitation of "receiving the transmit data packet, the deasserted transmit enable signal for at least one of the media independent interfaces corresponding to the other network ports" "based on the concurrent assertion of the transmit error signal and the deassertion of the transmit enable signal" as stated in claim 16 is not addressed. As stated in the previous office action, "A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to the proper destination." This explanation addresses the limitation. The disrupt enable signal is the "transmit error signal" and the inverse of the "transmit enable signal".

As stated in the previous office action, Vijeh does not disclose a physical layer transmitter transmits the data. However Chou (US 5,850,526) states a LAN station has a physical layer making a physical connection to a medium connected to other LAN stations. The physical layer drives the compressed data packet from the LAN station onto the medium in a serial fashion (column 3, lines 57-63 and figure 2). Vijeh discloses the repeater communication takes place in a LAN transmitting packet data (column 1, lines 5-8). It would have been obvious for one of ordinary skill in the art at the time of the invention that Vijeh transmits data through a physical layer since the physical layer connects the LAN components to the transmission medium as described by Chou.

Therefore, all the limitations of claim 16 are disclosed in the previous rejections and the rejection of claim 16 is maintained.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vijeh et al (US 5,353,353) in view of Chou (US 5,850,526).

Regarding claim 7, Vijeh discloses a repeater, having a plurality of ports, receiving a data packet. The data packet includes a destination address (column 3, lines 18-31). The destination address is compared to determine if the incoming packet

Is addressed to a particular node. If the receiving node detects a match between its own node and the address within the DA field, it will attempt to receive the packet (column 1, lines 52-57). Figure 4 is a block diagram of destination address compare circuit (column 5, lines 23-62). A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to pass correctly to the proper destination. Vjeh does not specifically state a physical layer transmitter transmits the data however Chou (US 5,850,526) states a LAN station has a physical layer making a physical connection to a medium connected to other LAN stations. The physical layer drives the compressed data packet from the LAN station onto the medium in a serial fashion (column 3, lines 57-63 and figure 2). Vjeh discloses the repeater communication takes place in a LAN transmitting packet data (column 1, lines 5-8). It would have been obvious for one of ordinary skill in the art at the time of the invention that Vjeh transmits data through a physical layer since the physical layer connects the LAN components to the transmission medium as described by Chou.

Regarding claim 9, prior to transmitting, it is determined if the port is enabled or disabled and if the packet to be transmitted is corrupted as stated above.



Regarding claim 10, prior to transmitting, it is determined if the port is enabled or disabled and if the packet to be transmitted is corrupted as stated above. While this determination is taking place, the port is idle, in that the port is not transmitting.

Regarding claim 11, the data to be transmitted will be either a corrupted data packet pattern or an uncorrupted data packet pattern.

4. Claims 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vijeh et al (US 5,353,353) in view of Chou (US 5,850,526) further in view of Lo et al (US 5,940,392).

Regarding claim 16, Vijeh discloses a repeater, having a plurality of ports, receiving a data packet. The data packet includes a destination address (column 3, lines 18-31). The destination address is compared to determine if the incoming packet is addressed to a particular node. If the receiving node detects a match between its own node and the address within the DA field, it will attempt to receive the packet (column 1, lines 52-57). Figure 4 is a block diagram of destination address compare circuit (column 5, lines 23-62). A disrupt feature can be enabled and disabled on a port-by-port basis and it allows for the address comparison and disrupt decision to be made independently (column 3, lines 32-39). This system produces a disrupt mask and this mask pattern is provided to the repeater and used to selectively pass the message unmodified or disrupt the message based upon the pattern (column 3, lines 23-31). The disrupt feature must be enabled explicitly for each port as stated in column 5, line 64 to column 6, line 43. The port not receiving this disrupt enable signal will allow the proper message to

pass correctly to the proper destination. Vjeh does not specifically state a physical layer transmitter transmits the data however Chou (US 5,850,526) states a LAN station has a physical layer making a physical connection to a medium connected to other LAN stations. The physical layer drives the compressed data packet from the LAN station onto the medium in a serial fashion (column 3, lines 57-63 and figure 2). Vjeh discloses the repeater communication takes place in a LAN transmitting packet data (column 1, lines 5-8). It would have been obvious for one of ordinary skill in the art at the time of the invention that Vjeh transmits data through a physical layer since the physical layer connects the LAN components to the transmission medium as described by Chou. The combination of Vjeh and Chou does not disclose a table for identifying each network node by its corresponding destination address and the corresponding repeater port. Lo et al (US 5,940,392) discloses individual destination addresses associated with each repeater port are stored in a content addressable memory (abstract). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the memory storing the addresses associated with repeater ports as stated in Lo with the system of the combination of Vjeh and Chou to allow the easy access to the address information for the comparison of the source address and the end station address to take place in less time.

Regarding claim 18, each repeater port receives the enable/disable signal. The corrupted data can be sent in place of the normal received packet as stated above.

Regarding claim 19, prior to transmitting, it is determined if the port is enabled or disabled and if the packet to be transmitted is corrupted as stated above.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

**Any response to this final action should be mailed to:**

**Box AF**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE" or for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Burd, whose telephone number is (703) 308-

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7034. The Examiner can normally be reached on Monday-Thursday from 9:00 AM - 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

A handwritten signature in cursive script, reading "Kevin M. Burd", is written over a horizontal line.

Kevin M. Burd  
PATENT EXAMINER  
6/8/2004